Manage Strategically Crosscutting Process

Mission

Through NASA, the American people have invested in America's future by supporting an irreplaceable public aerospace research and development infrastructure consisting of a unique combination of physical resources and human talents. Managing these resources effectively and strategically is critical to achieving NASA's goals and objectives. Therefore, the goal of the Manage Strategically cross-cutting process is to provide a basis for the Agency to carry out its responsibilities effectively, efficiently, and safely through sound management decisions and practices. By integrating good general management practices with NASA's strategic processes, the Agency ensures that decisions are consistent with the goals, objectives, and strategies contained in NASA's Strategic, Implementation, and Performance Plans. Managing strategically also encourages all parts of the Agency to proceed together toward achieving a single set of strategic goals while enhancing management's ability to leverage limited resources, standardize processes where it makes sense to do so, streamline processes for timely results, and ensure rapid, reliable, open exchanges of information. Finally, managing strategically ensures that the public's investment in NASA is well-served and that the Agency's initiatives and achievements continuously inspire and serve America and benefit the quality of life on Earth for all humankind.

Implementation Strategy

For FY 2002, NASA's strategic management performance objectives (and associated annual performance goals) require the Agency to make the most effective use of appropriated funds, workforce, facilities, procurement processes and information technologies. In all cases, the performance metrics selected for FY 2002 reflect key management challenges particularly facing NASA. Additionally, several of the management areas, including management of human capital and financial management, address issues that have been identified by other organizations, including the General Accounting Office, as being Government-wide major management challenges. Finally, these management areas are also consistent with the Administration's reform agenda, which emphasize a Federal Government that is citizen-centered, results-oriented, and market-based.

Performance Metrics

Goal: Enable the Agency to carry out its responsibilities effectively, efficiently, and safely through sound management decisions and practices.

In order to know how successful we are in meeting the Manage Strategically goals and objectives, we have established nine annual performance goals, with accompanying indicators, against which we will measure our progress.

Objective: Protect the safety of our people and facilities and the health of our workforce.

Public Benefit: NASA protects the public's investment in our vision and missions by protecting the safety of the general public, the NASA astronauts and pilots, the NASA workforce, and our high-value equipment and property on and off the ground. The Agency's passion for and commitment to safety permeate everything we do, and all performance goals and indicators reflect NASA's priority-one commitment to health and safety, especially the goals and performance indicators in support of this managing strategically performance objective.

Annual Performance Goal: NASA will increase the safety of its infrastructure and the health of its workforce through facilities safety improvements, reduced environmental hazards, increased physical security, enhanced safety and health awareness, and appropriate tools and procedures for health enhancement. (2MS1)

- No fatalities will result from NASA mishaps.
- Per the Federal Worker 2000 Initiative, reduce the overall occurrence of injuries (due to occupational injury or illness) by 3% per year from the FY 1997 baseline to 1.15 occurrences per 100 workers.
- Award construction contract(s) for all identified critical facilities safety requirements as specified in the Agency Annual Construction Program.
- Award/modify all planned contracts for physical security upgrades to NASA's minimum essential infrastructure defined in the NASA Critical Infrastructure Plan.
- Reduce the level of Agency environmental noncompliance incidents and releases in order to achieve a 5% reduction from the FY 2000 level by 2005.
- Standardize and implement minimum elements of employee preventive and medical monitoring examinations to standardize services across the Agency using the recommendations from the U.S. Preventive Health Services Task Force.
- Establish a mechanism to aggregate employee epidemiological preventive health risk data for long-term tracking and as a basis for policy (This action will begin the process of creating an employee longitudinal health study similar to the Astronaut Longitudinal Health Study by establishing a voluntary, statistically significant pool of employees at each Center. This pool could potentially expand the control group for the Astronaut Study and will give NASA insight into any health hazards peculiar to each Center.).
- Develop and implement a medical quality assurance system based on comprehensive program audits of all aspects of health care delivery and assurances of professional competency.

This is NASA's first performance plan in which the inextricable relationship between safety and health has been clearly highlighted. The metrics contained under this annual performance goal focus on all components of ensuring a physically and psychologically safe and healthy work environment - by preventing worker and workplace mishaps.

Consistent with the Agency's Safety Initiative (ASI), launched in February 1999, NASA identified safety as its number one core value. ASI is aimed at strengthening NASA capabilities so that safety permeates every aspect of our work and that we routinely incorporate safety and health principles and practices into daily decision making. As a key component of ASI, the Office of the Chief Health and Medical Officer, created in May 2000, provides strategic direction and oversight of all elements contributing to

the achievement of a single goal – the protection of the health of the entire NASA workforce through optimal health care delivery and professional competency across the Agency. On the tactical level, this is accomplished by incorporating health and safety principles and practices into daily decision making at every level to ensure NASA adheres to the highest medical and ethical standards and satisfies all regulatory and statutory requirements.

Objective: Achieve the most productive application of Federal acquisition policies.

Public Benefit: NASA serves the public interest by implementing acquisition efficiencies and cost-saving strategies that provide the best return on the public's investment. These include streamlining acquisition regulations, assigning contractors more program-integration responsibility and accountability, and focusing NASA's civil service workforce on research and development activities rather than operational activities. In addition, NASA continuously seeks opportunities to partner with small, small disadvantaged, and women-owned businesses to increase the competitive base from which we purchase goods and services.

Annual Performance Goal: Continue to take advantage of opportunities for improved contract management by maintaining a high proportion of Performance Based Contracts (PBCs). (2MS2)

- Maintaining PBC obligations at greater than 80% of funds available for PBCs (funds available exclude grants, cooperative agreements, actions under $100,000, SBIR, STTR, FFRDCs, intra-governmental agreements, and contracts with foreign governments and organizations).

In order to utilize all categories of small business to the maximum extent practicable, at least meeting or exceeding the socioeconomic business goals set by Federal law or negotiated with the Small Business Administration, our annual performance goal will be:

Annual Performance Goal: Continue integrating small, small disadvantaged, and women-owned business together with minority universities into the competitive base from which NASA can purchase goods and services. (2MS9)
- Achieve at least an 8% Congressionally mandated goal for annual funding to small disadvantaged businesses (includes funding for prime and subcontractors awarded to programs supporting small disadvantaged businesses, Historically Black Colleges and Universities and other minority educational institutions, and women-owned small businesses).
- Award 1 percent of NASA's total contract and subcontract dollars to Historically Black Colleges and Universities and other minority institutions.

Addressing Procurement Management Challenges: NASA Office of Procurement has undertaken proactive management approaches in three key areas: human capital; outsourcing and oversight; and electronic commerce.

Human Capital: Over the last several years, procurement positions in the GS 1102 job series have been targeted areas for staff reductions. To help mitigate the impact of this decision on its customers and to ensure that the acquisition function remained viable at NASA, the Office of Procurement undertook several initiatives: 1) the NASA Career Development and Procurement Certification Programs, designed to ensure that acquisition professionals received uniform, high quality training that would meet

or exceed statutory standards; 2) NASA's Contracting Intern Program, designed to ensure that an adequate number of well-trained, college-educated, entry level talent was available to the Agency to offset downsizing, retirements, and demographic trends (i.e., the aging of the work force); and 3) Rotational Assignments with Industry, designed to add a corporate experience dimension to the Office of Procurement's other developmental programs. The program seeks to equip already high performing, senior acquisition professionals with the tools necessary to help them assume future procurement management and other leadership. Collectively, the three programs address entry-level, mid-level, and senior-level staff developmental needs.

Outsourcing and Oversight: On November 2000, the Associate Administrator for Procurement and the Associate Administrator for Safety and Mission Assurance jointly announced the establishment of the Surveillance Planning Team. The overall goal of the team is to provide policy direction and procedural guidance on appropriate surveillance planning for NASA-contracted work based on the risk associated with the work and contractor involvement. Team membership includes representatives from the Office of Procurement, the Office of Safety and Mission Assurance, Enterprise Offices, and other Functional Offices. The Office of Procurement also continues to work with the Defense Contract Management Agency, the Defense Contract Audit Agency, and other service providers to ensure that each dollar NASA spends on delegated contract oversight functions returns the best value possible in support of Agency mission objectives.

Electronic Commerce: The Office of Procurement continues to focus on the Internet as a means to achieve rapid, low-cost, reliable delivery of procurement information to broad audiences, especially small and small disadvantaged business concerns. In a recent report (GAO/NSIAD-99-37 February 1999), GAO concluded that the NASA Acquisition Internet Service (NAIS), established as the mechanism to implement electronic commerce by the Office of Procurement, "is a simple, effective, and user-friendly system for disseminating information on contract opportunities." NAIS has won both government and private sector praise for its accomplishments. Since its inception in 1994, NAIS has evolved into a portal that provides a broad range of procurement-related functions and information.

Delivering on one of its key goals, NAIS has streamlined or eliminated many of the steps required by the paper-based process for publicizing synopses of contracting opportunities and issuing solicitations. Contractors have praised the system for allowing them to electronically track contracting opportunities at NASA or to track only certain types of opportunities that best match their core capabilities. Prior to NAIS, contractors would either scan the Commerce Business Daily, or periodically call or visit NASA's procurement offices to identify contracting opportunities. NAIS will continue to expand and refine its offerings as it pursues its objective of being the electronic backbone for the Office of Procurement's various electronic initiatives.

Addressing the Small Business Challenge: In the new century, the world of business is more diverse and more technologically driven. Business and their customers are much more diverse – women, individuals with disabilities, and minority-owned businesses are important players. The rapid pace of technological advances pose both opportunities and challenges for small business. Small businesses are at the forefront of technological change because they are flexible and close to the customer. Accordingly, NASA's Office of Small and Disadvantaged Business Utilization will continue its effort to increase contract and subcontract dollars awarded to small disadvantaged businesses, particularly in high technology areas. This includes the participation of such firms in NASA's technology transfer and commercialization activities.

For FY 2002, the NASA Administrator has, as part of the overall small disadvantaged business goal, established a specific Agency-wide goal for awards to Historically Black Colleges and Universities and other minority institutions of 1 percent of NASA's total contract and subcontract dollars to increase utilization of these entities. These entities currently receive about 0.5 percent of NASA's total procurement dollars. These new awards will be based upon conformance with NASA's mission needs, technical superiority, and costs reasonableness. It is NASA's expectation that the entire student population of these universities will benefit from these expanded opportunities to satisfy NASA's programmatic requirements.

Objective: Manage our fiscal and physical resources optimally.

Public Benefit: NASA's budget and physical assets represent a significant investment to the American taxpayers, so it is incumbent on the Agency to manage these resources effectively and efficiently to optimize the return to the public on their investment. Agency strategies for ensuring optimal return include partnering, value engineering, outsourcing, performance-based contracting, energy conservation, recycling, and pollution prevention.

Annual Performance Goal: Revitalize Agency facilities and reduce environmental liability. (2MS3)
- Improve facility revitalization rate to 100-year frequency for all facilities as identified by the integrated long-term Agency plan.
- Reduce the Agency's unfunded environmental liability through a long-term strategy, annually investing an amount of not less than 3-5% of the Agency's environmental liability in environmental compliance and restoration funding.

Annual Performance Goal: Improve the Agency's financial management and accountability. (2MS10)
- Cost at least 75% of the resources authority available to cost during the fiscal year.
- Initiate the pilot phase (pilot Center cut-over) of the Core Financial project and initiate at least one other module project.

<u>**Addressing Financial Management Challenges**</u>:

Integrated Financial Management System: During the fall of 2000, the IFM program was totally restructured. The contract with the incumbent system developer,was terminated. The critical need for new integrated financial management systems was reaffirmed by the Agency leadership and an extensive planning effort was initiated. The program concept was significantly modified based on successful benchmarks from both the commercial and federal sectors. Rather than pursue a large-scale implementation approach, individual projects for specific functions were created based on the availability of commercial software applications. A best of suite strategy was adopted where Core Financial system requirements would drive the selection of an Enterprise Resource Planning (ERP) application. The ability of that application to be extended to fill a number of the other IFM requirements, as well as past performance in successful implementations, were key selection criteria.

An Agency-level project team is in place at the Marshall Space Flight Center, the Lead Center for the project, and the design phase will begin in February 2002. In addition, three "pathfinder" projects have begun to test out the processes and technical requirements for Agency-wide implementation of new administrative systems. The Langley Research Center is leading implementation of a new Travel Management system, and the Goddard Space Flight Center is leading projects for Resume

Management and Position Description Management. All three of these projects will be complete before the Core Financial Project enters the implementation phase.

Obligations Management: The Office of the Chief Financial Officer has worked closely with the Office of Inspector General (OIG) to address the obligations management challenges compiled by the OIG in its December 1, 2000 report. The issue of matching Agency disbursements to obligations was resolved with the publication of a November 2000 revision to the Financial Management Manual (FMM) 9011-5, which provided further written clarification of NASA's existing practices in this area. Matters discussed in the OIG audit of internal controls over processing deobligations were resolved through the Langley Research Center and Marshall Space Flight Center review of the transactions in question (the review established that these transactions were valid), and through the October 24, 2000 publication of new guidance in FMM 9041-17 regarding the recording of deobligations and required supporting documentation. Finally, the error in the preparation of the 1999 Statement of Budgetary Resources was a Headquarters' reporting error which had no budgetary impact; it was not an indication "…that significant uncertainty exists regarding how to properly manage obligations."

Objective: Enhance the security, efficiency, and support provided by our information technology resources.

Public Benefit: The public's investment in NASA ensures that the Agency's explorers, pioneers, and innovators can continue to expand frontiers in air and space. But, NASA's missions to advance and communicate scientific knowledge and understanding of the Earth, the solar system, and the universe, to use and develop space, and to research, develop, verify, and transfer advanced aeronautics and space technologies require optimal efficiencies in the use of NASA's limited Information Technology (IT) resources. To achieve this goal, NASA's IT planning is focused on four areas: safety and security, cost-effective common infrastructure and services, innovative technology and practices, and emerging IT areas (e.g., e-Business and e-Government).

Annual Performance Goal: Improve IT infrastructure service delivery by providing increased capability and efficiency while maintaining a customer rating of satisfactory. (2MS4)
- Improve IT infrastructure service delivery to provide increased capability and efficiency while maintaining a customer rating of satisfactory and holding costs per resource unit to established baselines for each major IT service.

Service	Established Cost Baseline
NASA ADP Consolidation Center (NACC)	$3.5 M per Processing Resource Unit
NASA Integrated Services Network (NISN)	$0.78/ KBPS per month
Outsourcing Desktop Initiative for NASA (ODIN)	$2,940 per Standard Workstation

Annual Performance Goal: Enhance IT security by meeting established performance indicators in three critical areas: Vulnerabilities Detected; Training; and IT Security Plans. (2MS5)
- Reduce known system vulnerabilities across all NASA Centers to at least the established target ratios (10 percent of systems scanned).

- Provide IT security awareness training to NASA employees, managers, and system administrators at or above targeted levels (below).
- Complete 90 percent of ITS plans for critical systems, including authorization to process.

IT Security Element	FY 2002 Target
Percentage Vulnerabilities Detected to Systems Scanned	10%
ITS Awareness Training:	
Civil Service Employees	80%
Civil Service Managers	95%
Civil Service System Administrators	90%
IT Security Plans completed for critical systems	90%

Annual Performance Goal: Enhance mission success through seamless, community-focused electronic service delivery. (2MS6)
- Develop the eNASA Strategic Plan and Roadmap to deliver electronic services and information to the public, partners, suppliers, key stakeholders, and the internal employees and teams that execute NASA's missions.
- Make the NASA Web more accessible, community-focused, and useful to all of NASA's diverse audiences as demonstrated by increased customer satisfaction from the FY 01 baseline survey results.
- Increase the scope and level of corporate and shared electronic services from the FY01 baseline.
- Implement digital signatures that are accepted by Federal Agencies for secure online communications.
- Post a majority of the NASA grants announcements online by the end of FY02, consistent with interagency efforts such as the Federal Commons Initiative which seeks to automate the Federal grants process.

Addressing the IT Management Challenge: While IT Security remains a significant area of management concern, the Agency has made an extensive, concerted effort to improve IT security. This effort has been framed by several audits: a 1998 review by Agency staff; several Inspector General audits; and a 1999 report by the General Accounting Office. The evaluations concluded that significant improvements were needed to counteract the threat to critical systems. NASA responded vigorously to the recommendations during 1999 and the first half of 2000 with an aggressive program to remedy deficiencies as quickly as possible. The IT security objectives established include:
- Improving adherence to Agency IT security policy;
- Reducing system and application vulnerabilities;
- Improving intrusion monitoring, reporting, and response;
- Achieving a trained workforce of users, managers, system administrators, and network administrators; and
- Improving mechanisms for user authentication and data protection.

In FY 2000, NASA started a Vulnerability Reduction Program to identify and target a list of high-risk exploits and vulnerabilities and to take steps to reduce the vulnerability. NASA has installed a common set of network auditing tools to scan systems for a set of known vulnerabilities; the number of vulnerabilities per system has been reduced. In FY 2002, NASA will update the set of vulnerabilities to be scanned across the agency to reflect the evolving threat.

In FY 2000, NASA also installed a common set of intrusion monitoring tools to improve detection of attacks on systems and to make it easier to determine whether an attack experienced by one Center is also being conducted against other Centers. The success of the network monitoring is evidenced by a four-fold decrease in the ratio of successful attacks to attempted attacks in FY 2000.

Both the GAO audit and the internal IT security program review noted that the NASA IT security training practices were inadequate and inconsistent. To address these criticisms, NASA conducted IT security awareness training for employees and onsite contractors and specialized IT security training for managers. Since system and network administrators are the first line of defense in protecting NASA's IT assets from intrusions and detecting intrusions when they do occur, more specialized training for this group is planned for FY 2001 and 2002. The use of web-based training enables the Agency to broaden course offerings, simplify distribution, and make training available to any employee who has access to the Internet.

In FY 2000, NASA also began a concerted effort to update the IT security plans for critical systems, including signed authorization to process. In FY 2002 NASA will complete this effort for Special Management Attention Systems, Mission systems, and systems with Business and Restricted Technology data. While substantial progress has been made in closing out most of the IT-security recommendations, NASA will continue making IT security an integral part of all systems operated by the Agency. NASA acknowledges that significant improvements must be followed by a focused, ongoing effort.

Objective: Invest wisely in our use of human capital, developing and drawing upon the talents of all our people.

Public Benefit: NASA's human capital investment strategies are rooted in the Agency's belief that employees are our most important resource. Therefore, to deliver on our research and development commitments to the public, NASA manages this resource consistent with changing Agency goals and objectives. In addition, NASA is committed to attracting and retaining a workforce that is: (1) representative at all levels of the diverse public it serves; and (2) renowned for its world-class, cutting-edge skills and competencies. To ensure that we retain a skilled, creative, and effective human resources capability that meets taxpayer expectations, NASA is striving to anticipate future human capital planning challenges and workforce issues as the Agency moves away from operations and toward its primary mission of research, development, and scientific discovery.

Annual Performance Goal: Align management of human resources to best achieve Agency strategic goals and objectives. (2MS7)
- By September 30, 2002, develop, test, and evaluate at each NASA Center a prototype of a consistent, Agency-wide workforce planning and reporting system that incorporates the current FAIR Inventory process.
- Develop an initiative to enhance Centers' recruitment capabilities, focusing on fresh-outs.
- Maintain, on an Agency-wide basis (excluding the Inspector General), the supervisor to employee ratio of 1:10 within a range of $\pm$ .5.

Additionally, to emphasize recruitment and revitalization of a diverse NASA workforce, our annual performance goal is:

Annual Performance Goal: Attract and retain a workforce that is representative at all levels of America's diversity. (2MS8)

- During the fiscal year, increase representation of minorities by at least 0.6 percent, women by at least 0.4 percent, and individuals with targeted disabilities by at least .085 percent.

Addressing the Human Capital Management Challenge: Over the last several years, NASA has aggressively conducted a series of internal reviews designed to reduce the size of the NASA workforce while continuing to focus on safety and mission success. Between FY 1993 and FY 2000, the Agency experienced a 26 percent civil servant reduction (with the Headquarters reduced by more than 50 percent); achieved a 15 percent reduction in Senior Executive Service positions Agency-wide (exceeding the mandated 10 percent reduction); and increased, on an Agencywide basis (excluding the Inspector General), the supervisor to employee ratio from 1:6 to 1:10. During FY 2000, NASA renewed the Agency's focus on the restructure and revitalization of the NASA workforce.

NASA's human capital management strategy centers on:
- attracting and retaining a high caliber, high tech, and diverse workforce whose skills and competencies are aligned with Agency mission objectives;
- investing in the technical training and career development of this critical resource; and
- cultivating a continued pipeline of talent to meet future science, math, and technology needs.

In formulating its strategy, the Agency has considered findings and recommendations contained in both internal reviews and external reports touching on human capital issues, including those of the Aerospace Safety Advisory Panel, the Office of Management and Budget, and the General Accounting Office.

In FY 2001, the Agency began a strategic resource planning activity, based on Centers' future vision and mission and taking into account critical workforce capabilities and facilities needed. Building on that activity in FY 2002, the Agency will in develop a process by which Centers will implement consistent workforce planning. The result will be a plan for each Center that links staffing, funding resources, mission and activities, and core competencies. It will enable the Centers to focus on recruitment, retention, training, succession and career development tailored to their individual circumstances while supporting Agency goals and objectives. This effort, in concert with identifying tools and flexibilities to recruit and retain needed skills, will enable NASA to have the right people in the right place at the right time to ensure mission success and safety. A Management Advisory Committee also has been established to review NASA's organization structure. It will complete a study of ways to delayer management levels to streamline organizations and develop an implementation plan. The study will focus on deputy positions and explore other rebalancing measures.

The Agency initiated a strategy in FY 2000 to accomplish work through a balance of permanent civil servants, time-limited civil service appointees, and individuals from the academic world who contribute through post-doctoral fellowships, grants programs,

Intergovernmental Personnel Act assignments, or other partnerships. The intent is to draw from a variety of sources to ensure the effective use of talent both within and outside the Agency. The use of non-permanent civil servants, where it makes sense, can be a means to infuse the NASA workforce with fresh ideas and allow the Agency to make changes quickly and efficiently with minimal adverse impact on the core workforce. Combined with support from contractors (approximately 85 percent of NASA's annual budget is contracted out), this approach will permit the Agency to focus on being a premier research and development organization – doing the things that NASA does best and relying on others to take on operations and other appropriate functions.

To counterbalance the aging of the workforce due to the halt in the influx of new college graduates during the years of downsizing, NASA intends in FY 2002 to develop an initiative to enhance Centers' recruitment capabilities, focusing on hiring fresh-outs. The Agency also continues to look for ways to help assure a future pipeline of talent from which NASA and others can draw. For example, FY 2001 marks the pilot year of the new NASA Undergraduate Student Research Program. This Agency-wide program was developed to extend and strengthen NASA's commitment to educational excellence and university research and to highlight the critical need to increase the Nation's undergraduate and graduate science, engineering, mathematics, and technology skill base. The Undergraduate Student Research Program also will build a national program bridge from existing NASA K-12 Education Program activities to other NASA Higher Education Program options that encourage and facilitate student interest in future professional opportunities with NASA and its partner organizations. Such opportunities might include NASA career employment, temporary assignment, undergraduate and graduate co-op appointment; or contractor positions.

Equally important to attracting the right people is the need to train and develop that talent. Agency expenditures for training and development of the NASA workforce increased from $30 million in 1997 to over $47 million in 2000 – from 2.5 percent of salary in FY 1997 to 3.6 percent of salary in FY 2000. In addition to funding more university level courses, the Agency has made a strong investment in ensuring NASA participation in conferences and symposia, where breakthrough research and ideas are being presented and shared, as well as providing training in other core functional areas. Emphasis is being placed on "just in time" training and coaching opportunities for project leader and team members to improve project team competencies, and efforts are being initiated to establish a network of experienced practitioners who can provide mentoring and access to expertise in project management. NASA also has updated its leadership model specifying the latest cutting edge skills and behaviors required for effective leadership. The model is linked to NASA's Strategic Plan and defines skill requirements for team leaders through senior executives. NASA requested additional FY 2002 resources to expand training delivery methods and emphasize the development of e-learning alternatives that can be accessed at all locations and levels.

NASA recognizes its greatest strength is its people – essential to safe operations, mission success, and responsible stewardship of the taxpayers' dollars. The Agency will continue to pursue focused activities to position NASA as an employer of choice, recruit and retain the best talent, and provide learning and developmental opportunities for the workforce.

Additional Management Challenges

Environmental Management

The Environmental Management Division in NASA's Office of Management Systems takes a very proactive and integrated approach to environmental management. Consistent with the strategy articulated in "NASA Environmental Excellence for the Twenty-First Century," the Agency is working on the immediate priority of bringing all NASA activities into compliance with current environmental requirements, while simultaneously restoring previously contaminated sites as quickly as funds allow. Conservation and pollution prevention will be considered in all new projects and programs to minimize environmental impacts and preserve our natural and cultural resources. This approach is clearly captured in NASA's environmental vision that "we will continue as a world leader in space exploration and aeronautics while maintaining environmental excellence." The strategy for achieving this vision includes four focus areas: prevention, compliance, restoration, and conservation. In this FY 2002 performance plan, the Agency has included performance metrics in the areas of compliance (2MS1) and restoration (2MS3).

In terms of specific areas of management concern, the decommissioning of the Plum Brook Reactor and consistent implementation of the National Environmental Policy Act (NEPA) are receiving focused attention by NASA management. In fact, both issues are on NASA's Top 10 Environmental Priorities in the current Environmental Management Division FY 2001 Operating Plan, with the Plum Brook reactor ranking as the top priority. The first five priorities are concerned with mandatory requirements that characteristically have associated legal liabilities. The second five priorities emphasize "best management practices" that offer the Agency the greatest benefits in terms of efficiency, effectiveness and cost. By placing emphasis on achieving the 10 priorities, NASA will greatly improve its legal and management situation in the area of environmental management.

Specifically, regarding the Nuclear Reactor Facility Decommissioning, Sandusky, Ohio, NASA has submitted a Decontamination and Decommissioning Plan to the Nuclear Regulatory Agency for review. Further, NASA has partnered with the U.S. Army Corps of Engineers to manage the decommissioning work aspects and included the decommissioning project in our budget request. The selected contractor and subcontractors are currently completing the necessary plans and required documentation prior to starting the decommissioning work.

Regarding National Environmental Policy Act (NEPA) Implementation, NEPA requires that NASA evaluate potential environmental impacts of proposed Federal actions as early as possible in the program/planning process. Management controls need to be strengthened to ensure greater visibility of and more consistent implementation of the NEPA process. Review of existing management controls, development and advocacy of improvements, and training activities have been planned and are being initiated.

International Technology Transfer/Export Control

The challenges concerning NASA's management of international agreements, and particularly international technology transfers, have been addressed through several processes. First, NASA issued two Federal Register notices amending the NASA Federal Acquisition Regulations (FAR) Supplement in February 2000 (see 65 Fed. Reg. 10031, February 25, 2000; 65 Fed. Reg. 6915, February 11, 2000). These new NASA FAR Supplement provisions remind NASA contractors of their obligations to comply with U.S. export control laws and regulations, and also provide specific notice regarding record-keeping requirements pertaining to contractor export activities within the scope of NASA-sponsored programs. Additionally, NASA is currently reviewing those FAR Supplement provisions with a view towards further amendments, as appropriate, to elaborate on the availability of Government-authorized export license exemptions.

Second, in response to recommendations from the NASA Inspector General, NASA is clarifying the definition of "foreign national" in its foreign visitors policy to ensure appropriate and consistent use of the term in the Agency's foreign visitors review program.

Finally, NASA has established an Agency-wide foreign national management information system to process all foreign national visitors to NASA facilities. This system is a state-of-the-art secure database that allows for each NASA facility to process requests for foreign nationals' access to NASA facilities, consistent with NPG 1371.2, and further provides an on-line system for NASA Headquarters program, desk officer, and International Visitor Control Authority review and approval or denial of visitors from designated areas.

Verification/Validation

Performance plan goals, indicators, and accomplishment claims are subject to audit by a number of internal and external groups. Therefore, we must be able to prove that we accomplished what we claim we accomplished, and we need to be able to document this proof. To ensure this capability, NASA relies on a number of processes for verifying and validating performance claims.

First, whenever possible, data in support of performance claims is gleaned from and/or validated against officially-maintained databases. The data-gathering process in all cases is subject to strict oversight. The integrity of each database also is ensured through independent audits and periodic checks by internal and/or external reviewers. These databases include: the NASA Personnel Payroll System (NPPS); the Consolidated Agency Payroll and Personnel System (CAPPS); the Incident Reporting System (IRIS); the Financial and Contractual Status of Programs System (FACS); the NASA Environmental Tracking System (NETS); the Veterans Administration Workers' Compensation Database; the consolidated NASA Occupational Health Annual Cost and Staffing Report; NASA Center Personal Property Reports; and the Center Cost Avoidance Database.

Second, a number of specific verification and validation processes are in place to support performance claims in specific areas. These include the following:

1. Integrated Financial Management System (IFMS) verification and validation are based on measures in the signed Program Commitment Agreement. Non-advocate and independent reviews are conducted periodically, and the results are reported to the HQ Program Management Council (PMC) and the IFM Council.

2. Performance Based Contracts (PBCs) are verified and validated three ways. First, PBCs are sampled routinely to ensure that each meets the criteria for designation as a PBC. Second, Occupational Health Quality Assurance Audits provide data to validate contract claims in the areas of health and safety. And, third, reviewers use the FACS database for verification checks.

3. Contract awards to small and small disadvantaged businesses are documented for verification and validation in the Summary Contractor Reports (SF 295) that are reviewed during Center Procurement Management Survey data checks. In addition, the Small Business Administration and the Department of Defense Contract Management Agency conduct periodic on-site surveys to verify and validate performance claims and process integrity, and the Minority Business Resource Advisory Council and the NASA/Prime Contractor Roundtable also do periodic reviews and make recommendations for process improvements to NASA management.

4. Information Technology (IT) performance data are verified and validated by periodic reviews conducted by a number of process overseers, including NASA and Center Chief Information Officers, staff of the NASA ADP Consolidation Center (NACC), project office staff of the NASA Integrated Services Network (NISN), and project office staff of the Outsourcing Desktop Management Initiative (ODIN). In addition, NASA's IT customers are given frequent opportunities to offer evaluations and recommendations for improved IT performance.

NASA continues to seek new verification and validation techniques for on-going performance indicators and to develop additional performance indicators that can be verified and validated with precision.

MULTI-YEAR PERFORMANCE TREND
Manage Strategically Crosscutting Process

Protect the safety of our people and facilities and the health of our workforce.

	FY 1999	FY 2000	FY 2001	FY 2002
Annual Performance Goal and APG #	Reduce the number of Agency lost workdays (from occupational injury or illness) by 5 percent from the FY 1994-96 3-year average. (#MS3) Achieve a 5% increase in physical resource costs avoided from the previous year through alternative investment strategies in environmental and facilities operations. (#MS4)	Reduce the number of Agency lost workdays (from occupational injury or illness) by 5% from the FY 1994-96 3-year average. (#0MS3) Achieve a 5% increase in physical resource costs avoided from the previous year through alternate investment strategies in environmental and facilities operations. (#0MS12)	NASA will increase the safety of its infrastructure and workforce with facilities safety improvements, reduced environmental hazards, increased physical security, and enhanced safety awareness among its employees by meeting all 5 performance indicators in this area. (#1MS1)	NASA will increase the safety of its infrastructure and the health of its workforce through facilities safety improvements, reduced environmental hazards, increased physical security, enhanced safety and health awareness, and appropriate tools and procedures for health enhancement. (#2MS1)
Assessment	#3 was green. #4 was green.	OMS3 was blue. OMS12 was blue.		

Achieve the most productive application of Federal acquisition policies.

	FY 1999	FY 2000	FY 2001	FY 2002
Annual Performance Goal and APG #	Increase obligated funds available for Performance Based Contracts to 80% (funds available exclude grants, cooperative agreements, actions <$100,000, Small Business Innovative Research, Small Business Technology Transfer Programs, Federally Funded Research and Development Centers, intragovernmental agreements, and contracts with foreign governments or international organizations). (#MS6)	Of funds available for Performance Based Contracts, maintain PBC obligations at 80% (funds available exclude grants, cooperative agreements, actions <$100,000, SBIR, STTR, FFRDCs, intragovernmental agreements, and contracts with foreign governments or international organizations). (#0MS5)		
Assessment	Green	Green		
Annual Performance Goal and APG #	Achieve at least the congressionally mandated 8-percent goal for annual funding to small disadvantaged businesses (including prime and subcontractors to small disadvantaged businesses, Historically Black Colleges and Universities, other minority educational institutions, and women-owned small businesses). (#MS7)	Achieve at least the congressionally mandated 8% goal for annual funding to small disadvantaged businesses (including prime and subcontractors, small disadvantaged businesses, Historically Black Colleges and Universities, other minority institutions, and women-owned small businesses). (#0MS8)		
Assessment	Green	Blue		

Achieve the most productive application of Federal acquisition policies.

	FY 1999	FY 2000	FY 2001	FY 2002
Annual Performance Goal and APG #	Enhance contract management through improved systems and information for monitoring and through an emphasis on the training of procurement personnel, and revise metrics to assess the overall health of the procurement function. (#MS9) Enhance contract management through improved systems and information for monitoring by implementing a strategy for evaluating the efficacy of procurement operations. (#MS10)		Continue to take advantage of opportunities for improved contract management by maintaining a high proportion of Performance Based Contracts and maintain a significant involvement in NASA programs of small businesses, minority institutions, and minority and women-owned businesses by meeting 2 out of 2 performance indicators in this area. (#1MS2)	Continue to take advantage of opportunities for improved contract management by maintaining a high proportion of Performance Based Contracts (PBCs). (#2MS2) Continue integrating small, small disadvantaged, and women-owned businesses together with minority universities into the competitive base from which NASA can purchase goods and services. (#2MS9)
Assessment	All targets were green.		TBD	TBD

Manage our fiscal and physical resources optimally.

	FY 1999	FY 2000	FY 2001	FY 2002
Annual Performance Goal and APG #	Achieve 70 percent or more of the resources authority available to cost within the fiscal year. (#MS5) Complete system validation of the Integrated Financial Management Program, and complete system implementation at Marshall and Dryden. (#MS12)	Cost 70% or more of available resources. (#0MS4) Begin the implementation at NASA installations of the Integrated Financial Management System following the completion of system testing. (#0MS11)	Renew Agency's management systems, facilities, and human resources through updated use of automated systems, facilities revitalization, and personnel training by meeting 4 out of 7 performance indicators in this area. (#1MS3) NOTE: This target is also a precursor to #2MS7 and #2MS8.	Revitalize Agency facilities and reduce environmental liability. (#2MS3) Improve the Agency's financial management and accountability. (#2MS10)
Assessment	#MS5 was green. #MS12 was red.	OMS4 was green. OMS11 was red.	TBD	TBD

Enhance the security, efficiency, and support provided by our information technology resources.

	FY99	**FY00**	**FY01**	**FY02**
Annual Performance Goal and APG #	Improve information technology infrastructure service delivery to provided increased capability and efficiency while maintaining a customer rating of "satisfactory" and holding costs per resource unit to the FY 1998 baseline. (#MS8) Complete remediation of mission-critical systems by March 1999, consistent with Government-wide guidance for the Year 2000. (#MS11)	Improve information technology infrastructure service delivery to provide increased capability and efficiency while maintaining a customer rating of "satisfactory" and holding costs per resource unit to the FY 1998 baseline. (#0MS10)	Improve IT infrastructure service delivery to provide increased capability and efficiency while maintaining a customer rating of "satisfactory," and enhance IT security through a reduction of system vulnerabilities across all NASA centers, emphasizing IT security awareness training for all NASA personnel, by meeting 2 out of 2 performance indicators in this area. (#1MS4)	Improve IT infrastructure service delivery by providing increased capability and efficiency while maintaining a customer rating of satisfactory. (#2MS4) Enhance IT security by meeting established performance indicators in three critical areas: vulnerabilities detected, training, and IT security plans. (#2MS5) Enhance mission success through seamless, community-focused electronic service delivery. (#2MS6)
Assessment	All targets were green.	OMS10 was green.		

Invest wisely in our use of human capital, developing and drawing upon the talents of all our people.

	FY99	FY00	FY01	FY02
Annual Performance Goal and APG #	Reduce the civil service workforce to below 19,000. (#MS1) Maintain a diverse NASA workforce through the downsizing efforts. (#MS2)	Reduce the civil service workforce to below 18,200. (#0MS1) Maintain a diverse NASA workforce through the downsizing efforts. (#0MS2)	Renew Agency's management systems, facilities, and human resources through updated use of automated systems, facilities revitalization, and personnel training by meeting 4 out of 7 performance indicators in this area. (#1MS3) NOTE: This target is also a precursor to #2MS3 and #2MS10.	Align management of human resources to best achieve Agency strategic goals and objectives. (#2MS7) Attract and retain a workforce that is representative at all levels of America's diversity. (#2MS8)
Assessment	All targets were green.	OMS1 was no longer applicable. OMS2 was green.		

Manage Strategically FY 2002	Budget Category	HEDS	Biological and Physical Research	Aero-Space Technology	Space Science	Earth Science	Research & Program Management
Annual Performance Goals							
2MS1: NASA will increase the safety of its infrastructure and the health of its workforce through facilities safety improvements, reduced environmental hazards, increased physical security, enhanced safety and health awareness, and appropriate tools for health enhancement.		X	X	X	X	X	X
2MS2: Continue to take advantage of opportunities for improved contract management by maintaining a high proportion of Performance Based Contracts (PBCs).		X	X	X	X	X	X
2MS9: Continue integrating small, small disadvantaged, and women-owned business together with minority universities into the competitive base from which NASA can purchase goods and services.		X	X	X	X	X	X
2MS3: Revitalize Agency facilities and reduce environmental liability.		X	X	X	X	X	X
2MS10: Improve the Agency's financial management and accountability.		X	X	X	X	X	X
2MS4: Improve IT infrastructure service delivery by providing increased capability and efficiency while maintaining a customer rating of satisfactory.		X	X	X	X	X	X
2MS5: Enhance IT security by meeting established performance indicators in three critical areas: Vulnerabilities Detected; Training; and IT Security Plans.		X	X	X	X	X	X
2MS6: Enhance mission success through seamless, community-focused electronic service delivery.		X	X	X	X	X	X
2MS7: Align management of human resources to best achieve Agency strategic goals and objectives.		X	X	X	X	X	X
2MS8: Attract and retain a workforce that is representative at all levels of America's diversity.		X	X	X	X	X	X